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EXAMINER
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BATTAGLIA, MICHAEL V

ART UNIT	PAPER NUMBER
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2627

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/549,640

**Applicant(s)**

MARTENS ET AL.

**Examiner**

Michael V. Battaglia

**Art Unit**

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Drawings***

2. The drawings are objected to because the rectangular boxes of Figs. 2 and 7 should be provided with descriptive text labels. For instance, providing element 27 of Fig. 2 with a --input unit-- label is suggested. It is noted however that the symbols inside the rectangular boxes of elements 74, 75, 77, 80 and 82 of Fig. 7 provide adequate description.

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

3. Claims 1-6 are objected to because of the following informalities.
    - a.) On line 10 of claim 1, replacing "a upper" with --an upper-- is suggested.
    - b.) On line 2 of claim 5, replacing "the step" with --a step-- is suggested to avoid improper antecedent basis issues.
- Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Narumi et al (hereinafter Narumi) (WO 2002/23542). Note that citations to the text of Narumi refer to the translation provided in US 2003/0185121.

In regard to claim 1, Narumi discloses a method of recording information on a record carrier (Figs. 8 and 9, element 800) of a writable type by writing marks in a track on a recording layer via a beam of radiation (Fig. 8, element 870) entering through an entrance face (Fig. 2, element 110 which is implicitly part of element 800) of the record carrier, the record carrier comprising a first recording layer (Fig. 8, element 820) and a second recording layer (Fig. 8, element 830), the first recording layer being present at a position closer to the entrance face than the second recording layer (Fig. 8), the method comprising a power control step ("test recording" of Paragraphs 0006, 0011, 0138 and 0148) for setting the writing power of the beam for the second recording layer which power control step comprises writing a test pattern ("specific data pattern" of Paragraph 0006) of marks in a power control zone (Fig. 8, element 836) located on the second recording layer (Paragraphs 0006, 0011, 0138 and 0148), and a[n] upper layer recording step preceding the power control step (Paragraph 0137), the upper layer recording step comprising writing marks in an upper area (Fig. 8, element 875) of the first recording layer (Paragraph 0137), the upper area substantially covering a radial position range (" $\delta'$ + $a$ + $\delta$ ") of

Paragraph 0139) on the first recording layer corresponding to a radial position range of the power control zone on the second recording layer (Fig. 8 and Paragraphs 0138-0139).

In regard to claim 7, Narumi discloses a device (Fig. 9) for recording information on a record carrier (Figs. 8 and 9, element 800) of a writable type by writing marks in a track on a recording layer via a beam of radiation (Fig. 8, element 870 and “laser light” of Paragraph 0144) entering through an entrance face (Fig. 2, element 110 which is implicitly part of element 800) of the record carrier, the record carrier comprising a first recording layer (Fig. 8, element 820) and a second recording layer (Fig. 8, element 830), the first recording layer being present at a position closer to the entrance face than the second recording layer (Fig. 8), the device comprising a head (Fig. 9, element 903) for providing the beam (Paragraph 0144), and a power control unit (Fig. 9, elements 901 and 902) for setting the writing power of the beam for the second recording layer by locating a power control zone (Fig. 8, element 836) on the second recording layer, and writing a test pattern (“specific data pattern” of Paragraph 0006) of marks in the power control zone preceded by writing marks in an upper area (Fig. 8, element 875) of the first recording layer (Paragraphs 0006, 0011, 0138 and 0148), the upper area substantially being located at a radial position (“ $\delta' + a + \delta$ ” of Paragraph 0139) corresponding to the radial position of the power control zone (Fig. 8 and Paragraphs 0138-0139).

In regard to claim 9, Narumi discloses that the power control unit is arranged for writing marks in the upper area by performing an upper power control step for setting the writing power of the beam for the first recording layer which upper power control step comprises writing a test pattern (“specific data pattern” of Paragraph 0006) of marks in a power control zone located on

the first recording layer (Paragraphs 0006 and 0011 and note that the upper area (Fig. 8, element 875) comprises first test recording area 826 (Fig. 8)).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (hereinafter Ito) (US 2003/0137909) in view of Narumi.

In regard to claim 1, Ito discloses a method of recording information on a record carrier (Fig. 6, element 50 and see Fig. 2 for the general structure of a record carrier with multiple recording layers) of a writable type by writing marks in a track on a recording layer via a beam of radiation ("laser light" of Paragraph 0076 and see Fig. 2, element 38) entering through an entrance face (an entrance face such as substrate 32 of Fig. 2 is implicit and inherent in the record carrier of Fig. 6) of the record carrier, the record carrier comprising a first recording layer ("first recording layer 51" of Fig. 6 and Paragraph 0070) and a second recording layer ("second recording layer 52" of Fig. 6 and Paragraph 0070), the first recording layer being present at a position closer to the entrance face than the second recording layer (Paragraph 0006: "In this specification, for convenience of description, in Fig. 2, a record layer 34 closer to the incoming laser light 38 is referred to as a first recording layer 34; whereas the other recording layer 33 is referred to as a second recording layer 33."), the method comprising a power control step (OPC) for setting the writing power of the beam for the second recording layer which power control

step comprises writing a test pattern (“test recording” of Paragraph 0014) of marks in a power control zone (Fig. 6, element 11 of element 52) located on the second recording layer (Paragraph 0076: “OPC region 11 . . . is provided in . . . the second recording layer 52” and Paragraph 0014), and a[n] upper layer recording step, the upper layer recording step comprising writing marks in an upper area (Fig. 6, element 11 of element 51) of the first recording layer (Paragraphs 0014 and 0076), the upper area substantially covering a radial position range on the first recording layer corresponding to a radial position range of the power control zone on the second recording layer (Fig. 6). Ito does not disclose that the upper layer recording step precedes the power control step.

Narumi discloses a[n] upper layer recording step (Paragraph 0137) preceding a power control step (“test recording” of Paragraphs 0006, 0011, 0138 and 0148) for setting the writing power of the beam for the second recording layer which power control step comprises writing a test pattern (“specific data pattern” of Paragraph 0006) of marks in a power control zone (Fig. 8, element 836) located on the second recording layer (Paragraphs 0006, 0011, 0138 and 0148), the upper layer recording step comprising writing marks in an upper area (Fig. 8, element 875) of the first recording layer (Paragraph 0137), the upper area substantially covering a radial position range (“ $\delta' + a + \delta$ ” of Paragraph 0139) on the first recording layer corresponding to a radial position range of the power control zone on the second recording layer (Fig. 8 and Paragraphs 0138-0139). Narumi discloses that, by performing the upper layer recording step, the amount of laser light reaching the power control zone is uniform when the power control step is performed, and, “[a]s a result, accurate recording conditions can be obtained” (Paragraph 0138).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the upper layer recording step of Ito to precede the power control step as suggested by Narumi, the motivation being to obtain accurate recording conditions from the power control step of Ito.

In regard to claim 2, Ito discloses that on the record carrier the track on the first recording layer extends spirally in a first direction (Fig. 4B and note that Fig. 4 and Paragraphs 0009 and 0010 explain how the opposite track path arrangement utilized in by the record carrier 50 of Fig. 6 is implemented) and the track on the second recording layer extends spirally in a second direction opposite to the first direction (Fig. 4A) for constituting a two part recording area (Fig. 6, element 5 which contains parts 15 and 16) logically separated (Fig. 4D) by an intermediate zone (Fig. 6, elements 102 and 103) that physically is constituted by a first intermediate part (Fig. 6, element 102) located at the end of the first recording layer and a second intermediate part (Fig. 6, element 103) located at the start of the second recording layer, the recording area being preceded by a lead-in zone (Fig. 6, element 101) located at the start of the first recording layer and being followed by lead-out zone (Fig. 6, element 104) located at the end of the second recording layer, the upper layer recording step comprising writing marks in the upper area in an outward direction from an inner radial position to an outer radial position (see Fig. 6 and note that the upper area is on the first recording layer which is recorded in an outward direction), and the power control step comprising writing the test pattern of marks in the power control zone in an inward direction from the outer radial position to the inner radial position (see Fig. 6 and note that the power control zone is on the first recording layer which is recorded in an inward direction).



In regard to claim 3, in the method of Ito in view of Narumi, the upper layer recording step comprises writing marks constituting the lead-in zone (note that the power control zone of Ito (Fig. 6, element 11) is included in the lead-in zone of Ito (Fig. 6, element 101) and that the upper area to which the upper layer recording step of Ito in view of Narumi writes marks substantially covers a radial position range on the first recording layer corresponding to a radial position range of the power control zone (see Fig. 6 of Ito, Fig. 8 and Paragraphs 0138-0139 of Narumi and the rejection of claim 1 over Ito in view of Narumi above)), and/or the upper layer recording step comprises writing marks constituting the first intermediate part.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Hashimoto (US 5,706,271).

Narumi discloses the method of claim 1 wherein the upper layer recording step is performed once for writing marks in an upper area sufficiently large for covering a radial position range on the first recording layer corresponding to a radial position range of a power control zone on the second recording layer (Fig. 8 and Paragraphs 0136-0139 and 0147). Narumi does not disclose that the power control zone is a large power control zone that allows multiple times performing the power control step, in particular during multiple recording sessions.

Hashimoto discloses a large power control zone (Fig. 1, element 5) that allows multiple times performing the power control step, in particular during multiple recording sessions (Col. 1, line 64-Col. 2, line 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for power control zone of Narumi to be a large power control zone that allows

multiple times performing the power control step, in particular during multiple recording sessions, as suggested by Hashimoto, the motivation being to allow the power control step of Narumi to be performed multiple times in the power control zone of Narumi.

7. Claims 5, 8, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Maeda (US 5,870,583).

In regard to claim 5, Narumi discloses the method of claim 1 wherein each recording layer on the record carrier comprises a pre-track pattern (Fig. 8, elements 822 and 832 and Paragraphs 0007 and 0134-0135), and the method comprises [a] step of retrieving information encoded in the pre-track pattern (reproduction performed by the “reproduction section 904” of Paragraph 0145). Narumi does not disclose that the information is power control information indicating the location of a power control zone on the second recording layer.

Maeda discloses a record carrier (Figs. 1 and 3) comprising a pre-track pattern (Fig. 3, “P-TOC”) comprising power control information (Col. 2, line 66-Col. 3, line 5: “In the P-TOC, . . . a power cal (calibration) area start address PCA [is] indicated.”) indicating the location of the power control zone (Fig. 3, “PCA”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the information retrieved from the pre-track pattern of Narumi to be power control information indicating the location of the power control zone of Narumi as suggested by Maeda, the motivation being for the location of the power control zone of Narumi to be indicated by the information retrieved from the pre-track pattern of Narumi by the method of Narumi.

In regard to claim 8, Narumi discloses the device of claim 7 wherein at least one recording layer on the record carrier comprises a pre-track pattern (Fig. 8, elements 822 and 832

and Paragraphs 0007 and 0134-0135), and the device comprises a demodulation unit (Fig. 9, element 904) for retrieving information from the pre-track pattern (Paragraph 0145: “reproduction section 904 . . . to demodulate reproduction information”). Narumi does not disclose that the information is power control information indicating the location of the power control zone.

Maeda discloses a record carrier (Figs. 1 and 3) comprising a pre-track pattern (Fig. 3, “P-TOC”) comprising power control information (Col. 2, line 66-Col. 3, line 5: “In the P-TOC, . . . a power cal (calibration) area start address PCA [is] indicated.”) indicating the location of the power control zone (Fig. 3, “PCA”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the information retrieved from the pre-track pattern of Narumi to be power control information indicating the location of the power control zone of Narumi as suggested by Maeda, the motivation being for the location of the power control zone of Narumi to be indicated by the information retrieved from the pre-track pattern of Narumi by the device of Narumi.

In regard to claim 10, Narumi discloses a record carrier (Figs. 8 and 9, element 800) of a writable type for recording information by writing marks in a track on a recording layer via a beam of radiation (Fig. 8, element 870 and “laser light” of Paragraph 0144) entering through an entrance face (Fig. 2, element 110 which is implicitly part of element 800) of the record carrier, the record carrier comprising a first recording layer (Fig. 8, element 820) and a second recording layer (Fig. 8, element 830), the first recording layer being present at a position closer to the entrance face than the second recording layer (Fig. 8), and a power control zone (Fig. 8, element 836) on the second recording layer for performing a power control procedure (“test recording” of

Paragraphs 0006, 0011, 0138 and 0148) for setting the writing power of the radiation beam for the second recording layer which power control procedure comprises writing marks in an upper area (Fig. 8, element 875) of the first recording layer (Paragraph 0137), the upper area substantially covering a radial position range (" $\delta'$ +a+ $\delta'$ ") of Paragraph 0139) on the first recording layer corresponding to a radial position range of the power control zone on the second recording layer (Fig. 8 and Paragraphs 0138-0139), and writing a test pattern ("specific data pattern" of Paragraph 0006) of marks in the power control zone (Paragraphs 0006, 0011, 0138 and 0148). Narumi does not disclose that the record carrier comprises power control information indicating the location of the power control zone. However, it is noted that at least one recording layer the record carrier of Narumi comprises a pre-track pattern (Fig. 8, elements 822 and 832 and Paragraphs 0007 and 0134-0135).

Maeda discloses a record carrier (Figs. 1 and 3) comprising a pre-track pattern (Fig. 3, "P-TOC") comprising power control information (Col. 2, line 66-Col. 3, line 5: "In the P-TOC, . . . a power cal (calibration) area start address PCA [is] indicated.") indicating the location of the power control zone (Fig. 3, "PCA").

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the pre-track pattern of the record carrier of Narumi to comprise power control information indicating the location of the power control zone of Narumi as suggested by Maeda, the motivation being for the record carrier of Narumi to comprise information indicating the location of the power control zone of Narumi.

In regard to claim 12, in the record carrier of Narumi in view of Maeda, at least one recording layer comprises a pre-track pattern (Narumi: Fig. 8, elements 822 and 832 and

Paragraphs 0007 and 0134-0135), the power control information being encoded in the pre-track pattern (see rejection of claim 12 over Narumi in view of Maeda above).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito in view of Narumi, as applied to claim 1 above, and further in view of Senshu (US 2003/0103429).

Ito in view of Narumi discloses the record carrier of claim 1 wherein the record carrier is an optical disc (Paragraph 0076 of Ito and note that laser light is used to record the information recording medium) and the upper layer recording step comprises writing marks at the radial position of the upper area (Fig. 6 of Ito, element 11 of element 51) on the first recording layer (see Paragraphs 0137-0139 of Narumi and the rejection of claim 1 over Ito in view of Narumi above), the power control zone (Fig. 6 of Ito, element 11 of element 52) on the second recording layer being located at corresponding radial positions (Fig. 6). Ito in view of Narumi does not disclose that the radial position of the upper area is substantially between 22.6 mm and 24.0 mm radially, and does not disclose that the power control zone on the second recording layer is located in particular between 22.7 mm and 23.9 mm radially. However, it is noted that the upper area of Ito in view of Narumi is a power control zone in a lead-in zone on the first recording layer (Ito: Fig. 6, element 11 of element 51 and Paragraph 0076).

Senshu discloses a power control zone ("test write area" of Fig. 2 and Paragraph 0248) of a lead-in zone ("lead-in zone" of Fig. 2 and Paragraph 0248) having a radial position between 23.1 mm and 24 mm radially (Paragraph 0248). Accordingly, the power control zone is provided near the inner circumference of the record carrier to make room for the user data area (Fig. 2, "Data Zone").

It would have been obvious to one of ordinary skill in the art at the time the invention was made for upper area of Ito in view of Narumi, which is a power control zone, on the first recording layer of Ito in view of Narumi and for the power control zone of Ito in view of Narumi on the second recording layer of Ito in view of Narumi to have a radial position between 23.1 mm and 24 mm radially as suggested by Senshu, the motivation being to provide the power control zones of Ito in view of Narumi at a radial location conventionally used in the art for power control zones and near the inner circumference of the record carrier of Ito in view of Narumi so that room is made for the user data area of Ito in view of Narumi (see Fig. 6 of Ito and note user data area 5). As a result, the radial position of the upper area of Ito in view of Narumi and further in view of Senshu on the first recording layer is between 23.1 mm and 24 mm radially and therefore substantially between 22.6 mm and 24.0 mm radially. Also, the power control zone of Ito in view of Narumi and further in view of Senshu on the second recording layer is located between 23.1 mm and 24 mm radially and therefore, in particular, between 22.7 mm and 23.9 mm radially (note that a power control zone is located between 22.7 mm and 23.9 mm radially if any part of the power control zone is located between 22.7 mm and 23.9 mm radially).

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Maeda as applied to claim 10 above, and further in view of Ito.

Narumi in view of Maeda discloses that record carrier of claim 10 but do not disclose that the track on the first recording layer extends spirally in a first direction and the track on the second recording layer extends spirally in a second direction opposite to the first direction for constituting a two part recording area logically separated by an intermediate zone that physically

is constituted by a first intermediate part located at the end of the first recording layer and a second intermediate part located at the start of the second recording layer, the recording area being preceded by a lead-in zone located at the start of the first recording layer and being followed by lead-out zone located at the end of the second recording layer.

Ito discloses a record carrier comprising a first recording layer (Fig. 6, element 51), a second recording layer (Fig. 6, element 52), and a power control zone (Fig. 6, element 11 of element 52) located on the second recording layer (Paragraph 0076: "OPC region 11 . . . is provided in . . . the second recording layer 52" and Paragraph 0014) for performing a power control procedure for setting the writing power of the radiation beam for the second recording layer (Paragraphs 0014 and 0076), wherein a track on the first recording layer extends spirally in a first direction (Fig. 4B and note that Fig. 4 and Paragraphs 0009 and 0010 explain how the opposite track path arrangement utilized in by the record carrier 50 of Fig. 6 is implemented) and the track on the second recording layer extends spirally in a second direction opposite to the first direction (Fig. 4A) for constituting a two part recording area (Fig. 6, element 5 which contains parts 15 and 16) logically separated (Fig. 4D) by an intermediate zone (Fig. 6, elements 102 and 103) that physically is constituted by a first intermediate part (Fig. 6, element 102) located at the end of the first recording layer and a second intermediate part (Fig. 6, element 103) located at the start of the second recording layer, the recording area being preceded by a lead-in zone (Fig. 6, element 101) located at the start of the first recording layer and being followed by lead-out zone (Fig. 6, element 104) located at the end of the second recording layer. Ito teaches that "higher accessing speed" is achieved with such an "opposite track arrangement" because the moving

distance of an optical head in the radial direction is small when transitioning from reproducing from the first recording layer to the second recording layer (Paragraphs 0009 and 0075).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the track on the first recording layer of Narumi in view of Maeda to extend spirally in a first direction and for the track on the second recording layer of Narumi in view of Maeda to extend spirally in a second direction opposite to the first direction for constituting a two part recording area logically separated by an intermediate zone that physically is constituted by a first intermediate part located at the end of the first recording layer and a second intermediate part located at the start of the second recording layer, the recording area being preceded by a lead-in zone located at the start of the first recording layer and being followed by lead-out zone located at the end of the second recording layer, as suggested by Ito, the motivation being increase the speed with which the record carrier of Narumi in view of Maeda is accessed.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narumi in view of Maeda as applied to claim 12 above, and further in view of Ito.

Narumi in view of Maeda discloses the record carrier of claim 12 but does not disclose that the pre-track pattern comprises a pregroove that exhibits a wobble constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track, the wobble exhibiting a wobble modulation for representing the power control information. Instead, the pre-track pattern in the record carrier of Narumi in view of Maeda comprises an “emboss area” having pre-formed “pits” for “information on the optical disc itself” (Paragraph 0006).



Ito discloses that pre-formed pits (“pits” “written in at the time of production of the disc” of Paragraph 0013) were an art-recognized equivalent to a pregroove that exhibits a wobble (“meander region (called a ‘wobble’ region) of a groove” of Paragraph 0013) for the purpose forming a pre-track pattern for disc information (i.e. information on the optical disc itself) (Paragraph 0013). The wobble of Ito is constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track and exhibits a wobble modulation for representing disc information (information is stored in the wobble of Ito by superimposing the disc information in the meandering of the groove (Paragraph 0013)).

Therefore, pregroove that exhibits a wobble of Ito was an art-recognized equivalent to the pre-formed pits of Narumi in view of Maeda at the time of the invention for the purpose of forming a pre-track pattern for disc information, and one of ordinary skill would have found it obvious to use either one including the pregroove that exhibits a wobble of Ito to form the pre-track pattern of Narumi in view of Maeda which comprises the power control information of Narumi in view of Maeda. As a result, in the record carrier of Narumi in view of Maeda and further in view of Ito, the pre-track pattern comprises a pregroove that exhibits a wobble constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track, the wobble exhibiting a wobble modulation for representing the power control information.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee et al (US 2006/0203648) disclose a record carrier having multiple recording layers each having an OPC area and, before performing OPC, data is recorded on an upper area

through which the beam for OPC passes (Fig. 1 and Paragraphs 0028, 0039 and 0040). Shoji et al (US 2003/0137915) disclose a record carrier having first and second recording layers having tracks spiraling in opposite directions for an opposite track path arrangement (Fig. 5) and each having a test recording area (Fig. 9, elements 909 and 915). Nakano (US 2002/0136122) discloses that the “quantity of a transmitting beam is changed depending on the recording states of information recording layers positioned on the incidence side of the information recording layer in which information is to be recorded” (Abstract). Yokogawa et al (US 5,608) discloses that it is preferable for the tracks of first and second recording layers to spiral in opposite directions so that neither rotation direction nor rpm need changing when shifting from the first to second recording layer (Figs. 20 and 21 and Col. 14).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Battaglia whose telephone number is (571) 272-7568. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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